UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

AUG 17 2017

REPLY TO THE ATTENTION OF

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, Ohio 43216-1049

Dear Mr. Hall:

The U.S. Environmental Protection Agency has reviewed the Title V renewal permit, permit number P0115099 (draft permit), for Heritage Thermal Services, located in East Liverpool, Ohio. To ensure that the source meets Federal Clean Air Act requirements, that the permit will provide necessary information so that the basis of the permit decision is transparent and readily accessible to the public, and that the permit record provides adequate support for the decision, EPA has the following comments:

1. **The draft permit is missing operating parameter limits (OPLs) required by 40 C.F.R. Part 63, Subpart EEE.**

   The draft permit is missing:

   a. The minimum activated carbon injection rate (lb/hr, hourly rolling average, calculated as the average of the test run averages), as required by 40 C.F.R. § 63.1209(k)(6)(i); and

   b. The carbon specification (brand and type of carbon used during the comprehensive performance test), as required by 40 C.F.R. § 63.1209(k)(6)(iii).

   Because the above OPLs are applicable requirements, they should be specified in the permit. 40 C.F.R. § 70.6(a)(1) requires that each permit include "emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements."

2. **Please clarify whether the draft permit requires the Permittee to sample and analyze for arsenic, beryllium, cadmium, chromium, lead and mercury (maximum achievable control technology (MACT) metals) a specific percentage of "every load that arrives at the facility" as specified in the statement of basis for the draft permit (SB).**

The SB states that the facility has developed a sampling/analytical protocol "*that requires the facility to sample X% of every load that arrives at the facility allowing for a certain amount [of] variability of wastes as they enter the facility.*" *See* SB section titled: "Addressing the CITGO Decision." However, this statement appears to contradict with the Feedstream Analysis Plan (FAP), which states that certain "categories of waste" (termed "Miscellaneous Special Waste" or MSW) do not require sampling and analysis. *See* FAP Sections 2.2 (page 59 of the draft permit) and 2.6.1.2 (page 63 of the draft permit) (referring to the Waste Analysis Plan (WAP) Section C-1b). Specifically, the FAP states that "10% of the containers or a least one container from each *non-MSW* waste profile received in a shipment" shall be sampled and analyzed. *See* FAP Section 2.6.1.2 (emphasis added). Please clarify whether there are feedstreams that are not sampled and/or analyzed, and how the Permittee ensures that the concentrations of MACT metals in those feedstreams would not make the Permittee violate emission limits in Condition C.5(b)(2) that apply to MACT metals.

3. **The Permittee's classification of feedstreams that are exempt from waste acceptance sampling and analysis (i.e., "Miscellaneous Special Wastes" or MSW) is too broad to properly account for MACT metal concentrations in the individual feedstreams. In addition, the feedstreams covered by the exempt categories include materials that EPA believes can be sampled and analyzed.**

The WAP describes the facility's pre-acceptance and acceptance procedures and identifies the waste categories that do not require sampling and analysis. *See* FAP Section 2.2 (page 59 of the draft permit). Section C-1b(2)(ii) of the WAP lists three categories of wastes for which pre-acceptance or waste acceptance samples are not required, including wastes "whose contents are sufficiently known" (Category 1), wastes "that cannot be representatively sampled" (Category 2), and wastes "that present exposure hazards" (Category 3). However, the feedstreams covered by these exempt categories include materials that EPA believes can be sampled and analyzed. To ensure continuous compliance with the not-to-exceed MACT emission limits in Condition C.5(b)(2), the permit should limit the number of feedstreams that the Permittee may exempt from sampling and analysis. As an option, the Ohio Environmental Protection Agency (OEPA) may wish to include in the draft permit a provision that allows the Permittee to request case-by-case exemption of additional rarely-received feedstreams.

Our specific comments on the exempt categories are as follows:

a. Category 1 consists of feedstreams "whose contents are sufficiently known, typically through a MSDS, analytical supplied by the generator, and/or other information that sufficiently documents the waste's characteristics." This category includes feedstreams such as "commercial products or chemicals that are off-specification, outdated, slightly contaminated, banned, discontinued, or otherwise determined to be unusable," "consumer products," "residues and debris

from the cleanup of spills or releases of a single chemical substance or commercial product or a single waste which would otherwise qualify as a MSW," "waste produced from the demolition or dismantling of industrial process equipment or facilities contaminated with chemicals from the process," among others." Although off-specification commercial products or chemicals can pose sampling and analytical challenges, such a situation typically only occurs if the feedstreams are packaged in consumer quantities, are unused or banned, and are in their original packaging. Commercial products or chemicals that are not packaged in numerous small containers or are unknowns (such as having no labels or other identification) should be sampled and analyzed unless the generator has certified in writing that the material would be packaged in consumer quantities but for the fact that the material is off-specification. In addition, to ensure MACT metals are quantified, the generator should certify that the product is not off-specification because of the presence of MACT metals.

b. The facility should not exempt from sampling and analysis "residues and debris" from the cleanup of single chemical or waste spills or releases. EPA believes such feedstreams can and should be sampled and analyzed for MACT metals unless the Permittee can adequately explain why those feedstreams cannot be sampled and analyzed. The spills covered by this exemption could potentially include media that was previously contaminated with unknown metal-containing constituents. Similarly, "waste produced from the demolition or dismantling of industrial process equipment or facilities contaminated with chemicals from the process" should not be exempted from sampling and analysis for MACT metals unless the Permittee can adequately explain why those feedstreams cannot be sampled and analyzed.

c. Categories 2 and 3 consist of wastes that cannot be representatively sampled, or that present exposure hazards, respectively. These wastes include debris and personal protective equipment, empty containers, lab packs, among others. For such (and other exempt) feedstreams, the FAP states that generator-supplied information is used to determine ash, total chloride and MACT metals content. We believe that if the physical nature of the waste makes it technically impracticable to obtain a representative laboratory sample and/or conduct an analysis of a representative sample, the permit should specify that the generator-supplied knowledge shall be applied to identifying the composition of the base construction materials of the waste (e.g., steel in the case of steel piping). If the Permittee does not have such generator knowledge of the material or of its the coating or residue, the Permittee should collect surface "wipe" samples or, if coated or containing residue, remove a chip of paint or other coating or residue and conduct laboratory analysis to determine the representative concentrations of any contaminants present. The use of generator knowledge should be consistent with EPA guidance as contained in Section 1.2 of Waste Analysis at Facilities that Generate, Treat, Store, and Dispose of Hazardous Wastes - Final, A Guidance Manual, EPA 530-R-12-001 (April 2015), available at

http://www2.epa.gov/sites/production/files/2015-04/documents/tsdf-wap-guide-final.pdf.

d. EPA has previously determined in petitions that the permit must include any plans that are necessary to assure compliance with applicable requirements. See, for example, *In the Matter Of Alliant Energy -WPL Edgewater Generating Station*, Petition No. V -2009-02, August 17, 2010 (Order on Petition). The permit should include the specific sections of the WAP that are being relied upon to comply with the FAP requirements. Specifically, please identify in the Title V permit the specific feedstreams that are exempt from sampling and analysis. Alternatively, OEPA may require that any revisions to specifically incorporated sections of the WAP constitute revisions to the Title V permit that must be approved by OEPA.

4. Please see Attachment A for additional comments.

We appreciate the opportunity to provide comments on this permit and look forward to discussing them with you. If you have any questions, please feel free to contact Richard Angelbeck, of my staff, at (312) 886-9698.

Sincerely,

Genevieve Damico
Chief
Air Permits Section

Enclosure

Attachment A

1. Permittee appears to be tracking the concentrations of MACT metals that are not detected during sampling and analysis of certain feedstreams as equal to zero, which may lead to underestimation of MACT metals. Under the Permittee's sampling and analytical protocol, it appears that actual metal concentrations that are just below the detection limit would be reported as zero concentrations in some situations. An exception is specified for "MACT performance testing," in which case analyses returning a result less than that of the specified instrument or method detection limit would be recorded as one-half of the detection limit. *See* FAP Section 2.5 (page 61 of the draft permit). Tracking of non-detected metal concentrations as zero may lead to underestimation of MACT metal concentrations in some cases. Section 40 C.F.R. § 63.1209 requires that the analysis of feedstreams must be "sufficient to document compliance with the applicable feedrate limits." To ensure that MACT metal concentrations used to demonstrate compliance with feedrate and MACT emission limits are not under-estimated, we recommend the FAP require that non-detected metal concentrations should be tracked at the detection limit or other specified non-zero concentration that appropriately accounts for the expected worst-case metal content of the associated feedstream. To ensure that lower actual metal concentrations can be detected and reported by the analytical methods employed by the Permittee, OEPA and the Permittee may wish to explore options for lowering the instrument and method detection limits.

2. Permit terms C.4.f(1)a-c, and C.6.f(1)a-d all note that testing will be conducted "if required" to do so. The permit should be revised to require testing at least once a permit term or explain why less frequent testing is sufficient. In accordance with 40 C.F.R. § 70.6(c), testing of emission units should be sufficient to ensure compliance with the permit limitations, proper operation of the control equipment, and verification of control efficiencies.

3. Permit terms C.5.c(1) and C.5.d(1) require the Permittee to comply with all applicable requirements of 40 CFR § 63.1206 and 40 CFR § 63.1209, respectively. These citations are not sufficiently detailed to understand the specific requirements for which the Permittee must comply. Please include the specific requirements from 40 C.F.R. §§ 63.1206 and 63.1209 in sufficient detail so that it is clear in the permit what is required of the Permittee.

4. Permit conditions f)(1)e-i, k-l, and o on pages 76-79 of the draft permit describes the test methods, but does not prescribe frequency or schedule for the tests. Please add the testing schedule or testing frequency to the permit.

5. Permit condition C.9.d(8)e requires a Leak Detection and Repair (LDAR) program. Please revise the permit to clarify that the LDAR program is a permit requirement for all applicable emission units. Also, consider including the option of using a Forward Looking Infrared camera as an alternative monitoring method.